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47. (NEW) In an image data capturing and processing device including means for digitizing captured image data and a memory element for storing digitized image data, the improvement comprising:

output data control means for selecting one of a plurality of different output data format codes stored in the image data capturing and processing device, each output data format code to be associated with each digitized captured image to be stored in the memory element and corresponding respectively to one of a like plurality of different data formats for different types of computer ^{Programs} ~~apparatus~~ and

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logic means responsive to said output data control means for determining an output data format for a digitized captured image in accordance with a selected one of said plurality of different output data format codes.

2 48. (NEW) The improved arrangement of Claim ¹ ~~47~~ further comprising picture image resolution determining means for selectively determining which of a plurality of compression algorithm parameters are to be applied to said digitized captured image.

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49. (NEW) The improved arrangement of Claim 48 wherein said memory element comprises a removably mounted digital diskette having thereon a plurality of selectively addressable magnetic sector and track sections for recording a selected compressed version of a digitized captured image.

4 50. (NEW) The improved arrangement of Claim ² ~~48~~ wherein a digital decompression algorithm associated with a compression algorithm selected by said image resolution determining means is also stored on said memory element and further comprising record marking means for storing a digital coded mark for indicating decompression algorithm parameters to be utilized in decompressing each said digitized captured image.

51. (NEW) The improved arrangement of Claim ²~~48~~ further comprising record marking means for storing a unique digital mark indicating compression algorithm parameters utilized in compressing each said digitized captured image.

52. (NEW) The improved arrangement of Claim ²~~48~~ further comprising record marking means for generating and storing with each said digitized captured image a coded mark indicating the compression algorithm parameters utilized in compressing said digitized captured image.

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53. (NEW) The improved arrangement of Claim ¹~~47~~ further comprising memory formatting means operable during a power-up routine to automatically format said memory element in accordance with one of a plurality of ^{memory}~~output data~~ formats.

54. (NEW) The improved arrangement of Claim ¹~~47~~ further comprising audio recording means for simultaneously storing digital audio signals associated with each subject image and memory file correlation means for associating in said memory element the respective storage locations of said audio signals with its associated image signals.

55. (NEW) The improved arrangement of Claim ¹~~47~~ further comprising control means for improving image signal storage efficiency by selectively determining an amount of storage of said memory element to be associated with storage of each picture image.

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56. (NEW) An image data capturing and processing device comprising:
means for capturing image data corresponding to a selected image;
means for digitizing captured image data;
removably mounted memory means for storing digitized image data;

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output data format control means for storing in said device at least one of a plurality of different output data format codes where each of said plurality of output data format codes corresponds respectively to one of a like plurality of different data ^{file} formats for different types of computer ^{programs} apparatus; and logic means responsive to said format control means for selectively controlling the formatting of said digitized captured image data in accordance with a selected one of said plurality of different output data codes.

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11 ¹⁰ 57. (NEW) The device of Claim ¹⁰ 56 further comprising memory formatting means operable to automatically format said removably mounted memory means in accordance with one of a plurality of operator selectable data storage formats.

12 ¹⁰ 58. (NEW) The device of Claim ¹⁰ 56 further comprising image resolution determining means for selectively determining which of a plurality of compression algorithm parameters are to be applied to said digitized image data.

13 ¹² 59. (NEW) The device of Claim ¹² 58 further comprising record marking means for indicating which one of said plurality of compression algorithm parameters were utilized to compress said digitized image data.

14 ¹⁰ 60. (NEW) The device of Claim ¹⁰ 56 wherein said removably mounted memory means comprises digital data diskette means and further comprising selectable diskette formatting means for automatically formatting the diskette means in accordance with one of a plurality of operator selectable ^{memory} data formats.

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61. (NEW) The device of Claim 56 further comprising remote activation means for selectively activating said device and logic means responsive to said remote activation means for initiating ^{a memory} ~~an output data~~ format check of said removably mounted memory means.

62. (NEW) A process for storing a digitized version of data corresponding to a captured image, the process comprising:

storing in a selectively addressable memory at least one of a plurality of different digital output ^{file} data format codes, each code corresponding respectively to one of a like plurality of different data ^{file} formats for different types of computer ^{programs} apparatus,

formatting the digitized version of a captured image in accordance with a selected digital output data ^{file} format code, and

storing the formatted digitized version in a digital memory.

63. (New) The process of Claim 62 further comprising the preliminary steps of: checking the format of the digital memory for agreement with a format specified with the selected digital output data format code, and

performing format initialization of the digital memory whenever agreement with the selected format is not found.

64. (New) The method of Claim 62 wherein the digital memory is removably coupled to the image capturing and processing device.

65. (New) The method of Claim 62 wherein the digital memory comprises a memory element normally associated with a personal computer.

66. (NEW) In an image data capturing and processing device capable of generating a digitized version of a captured image,

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a memory for storing format data defining an output file format for a digital storage device corresponding to a specific type of information handling apparatus, and format determining means for retrieving the format data from the memory, for selectively arranging the digitized version of the captured image and the format data into the output file format, and for storing the formatted output file contents in an image memory element.

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67. (New) The device of Claim 66 further comprising:

means for checking format status of the image data memory element to insure correspondence with the output file format defined by the format data and for performing format initialization of the image data memory element whenever correspondence with the output file format defined by the format data is not found.

68. (NEW) The device of Claim 66 further comprising data compression means for compressing the digitized version of the captured image before said digitized version is formatted by selectively utilizing one of a plurality of predetermined compression algorithm parameters and additionally including means for storing in said image data memory element a signal to signify which of said plurality of compression algorithm parameters are associated with said compressed digitized version of a captured image.

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69. (New) A process for storing a digitized version of data corresponding to a captured image, the process comprising:

retaining an indication of a preselected output data file format;

retrieving the indication and formatting the digitized version in accordance with the retrieved indication; and

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storing the formatted digital version in a digital memory element capable of being coupled to an information handling device ^{having a program} utilizing the preselected output data file format.

70. (New) The process of Claim 69 further comprising the steps of:
after retrieving the indication, checking the format of the digital memory element for agreement with the preselected format; and
automatically performing format initialization of the digital memory element whenever agreement with the preselected format is not found.

71. (NEW) The process of Claim 69 further comprising the steps of:
compressing the digitized version by selectively utilizing one of a plurality of predetermined compression algorithm parameters; and
storing in the digital memory element with the compressed formatted digital version a signal corresponding to decompression algorithm parameters.

72. (NEW) A video image signal data format translator comprising:
An input interface for removable receipt of a first memory element containing a first electrical representation of a captured image;
a converter coupled to the input interface and operative to convert the first electrical representation into a second electrical representation;
an output interface for removable receipt of a second memory element normally usable in conjunction with an information handling device; and
a stored program controller operative to arrange the second electrical representation in a preselected format and to present the formatted second electrical representation to the output interface for storage in a second memory element, the format being directly compatible with ^{a program running on} ~~an operating system~~ of the information handling device.

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73. (NEW) The translator of Claim 72 wherein the stored program controller is further operative to check the format of a second memory element coupled to the output interface for agreement with the preselected format and to perform format initialization of the second memory element whenever agreement with the preselected format is not found.

74. (NEW) The translator of Claim 72 wherein the input interface can removably receive a first memory element comprising an analog video memory element, the output interface can removably receive a second memory element comprising a digital memory element, and the converter includes an analog to digital converter.

75. (NEW) A video image signal data format translator comprising:

an input interface for receipt of a first electrical representation of a captured image;

a converter coupled to the input interface and operative to convert the first electrical representation into a second electrical representation;

an output interface for presenting the second electrical representation for use by an information handling device; and

a controller operative to arrange the second electrical representation in a preselected format directly compatible with the information handling device.

76. (NEW) The translator of claim 75 wherein the first electrical representation comprises NTSC video format.

77. (NEW) The translator of claim 75 wherein the first electrical representation comprises PAL video format.

78. (NEW) The translator of claim 75 wherein the first electrical representation comprises RGB video format.

79. (New) A method of translating a first electrical representation of a video image signal into a second electrical representation of the video image signal for use by an information handling system, the method comprising:

reading the first electrical representation and presenting the first electrical representation to a converter;

converting the first electrical representation into the second electrical representation using the converter;

determining a preselected format for the second electrical representation;

formatting the second electrical representation in accordance with the preselected format; and

presenting the formatted second electrical representation to the information handling system utilizing the preselected format for direct use thereby.

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80. (NEW) A method of translating a first electrical representation of a video image signal into a second electrical representation of the video image signal for storage in a memory element, the method comprising:

reading the first electrical representation and presenting the first electrical representation to a converter;

converting the first electrical representation into the second electrical representation using the converter;

determining a preselected format for the second electrical representation;

formatting the second electrical representation in accordance with the preselected format; and

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writing the formatted second electrical representation to the memory element thereby enabling direct use of the memory element with an information handling system utilizing the preselected format.

81. (New) The method of claim 80 comprising the additional step of checking a format of the memory element for agreement with the preselected format and initializing the format of the memory element in accordance with the preselected format whenever said agreement is not found.

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82. (NEW) In an improved image signal capturing and processing device capable of generating a digitized version of a captured image:

a memory for storing output data file format determining code data;

a generator for examining the digitized version of the captured image and generating a corresponding picture size indication;

output data file format determining means for retrieving format determining code data from the memory corresponding to a format used by a preselected type of information handling apparatus;

logic means responsive to the picture size indication generator and the output data file format determining means for selectively arranging picture size indication data, the digitized version of the captured image, and the format determining code data into a predetermined formatted output data file corresponding in file structure and arrangement to an input file format of the preselected type of information handling apparatus; and

means for removably mounting a digital memory to the image signal capturing and processing device for storing the formatted output data file.

83. (NEW) A process for selectively formatting and storing electronic video image signals comprising:

determining picture size data corresponding to an image signal;
retrieving a previously stored output digital data file format determining code from a selectively addressable memory wherein the code determines a data file structure and arrangement corresponding to an input data file format of a predetermined type of information handling apparatus;
combining the picture size data and the image signal in a digital file structure determined by the code; and
storing the data file in an output memory.

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84. (NEW) A video image signal data format translator comprising:
an input interface for receipt of a first electrical representation of a captured image;
a converter coupled to the input interface and operative to convert the first electrical representation into a second electrical representation;
a generator for examining the second electrical representation and generating a corresponding picture size indication;
a control memory for storing output data file format determining code data;
output data file format determining means for retrieving format determining code data from the control memory corresponding to a format used by a preselected type of information handling apparatus;
logic means responsive to the generator and format determining code data for selectively combining the second electrical representation and the picture size indication into an output file having the format used by the preselected type of information handling apparatus;
an output interface adapted for removable receipt of an output memory element normally usable in conjunction with the preselected type of information handling apparatus; and

means for presenting the output file to the output interface.

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85. (NEW) The apparatus of Claim 82 further comprising means for checking a format of a digital memory, mounted to the means for mounting, for agreement with the format determined by the format determining code data and for performing format initialization of the digital memory whenever agreement with the format so determined is not found.

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86. (NEW) The process of Claim 83 further comprising the steps of:
checking a format of the output memory for agreement with the data file structure corresponding to the format determining code; and
performing format initialization of the output memory whenever such agreement is not found.

87. (NEW) The translator of Claim 84 further comprising:
means for checking a format of an output memory element, coupled to the output interface, for agreement with the format determining code data and for performing format initialization of the output memory element whenever such agreement is not found.

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88. (NEW) An improved electronic camera comprising:
an optical lens;
shutter means operably associated with said lens;
an array of discrete light sensing pixel elements, each pixel element being responsive to incident illumination from a subject image radiating through said lens and shutter means to generate an analog picture information signal corresponding to said subject image;

analog to digital converter means for converting said analog picture information signal into corresponding digital data information signals;

memory means for storing said digital data information signals;

output data control means for implementing one of a plurality of different output data format codes prerecorded in said camera to be associated with each said digital data information signals wherein said plurality of output data format codes corresponds respectively to one of a like plurality of different data formats for different types of information handling apparatus; and

logic means responsive to said output data control means for determining the output data format file structure of said digital data information signals in accordance with said output data format code.

17 ~~89~~. (NEW) The improved electronic camera of claim ¹⁶~~88~~, further comprising picture image resolution determining means for selectively determining which of a plurality of compression algorithm parameters are to be applied to said digital data information signals.

18 ~~90~~. (NEW) The improved electronic camera of claim ¹⁶~~88~~, wherein said memory means comprises digital data means having a plurality of addressable sections for storing said digital data information signals.

19 ~~91~~. (NEW) The improved electronic camera of claim ¹⁶~~88~~, further comprising memory organizing means for automatically formatting said memory means in accordance with said output data format code.

20 ~~92~~. (NEW) The improved electronic camera of claim ¹⁷~~89~~, further comprising marking means for recording a unique mark indicating decompression algorithm parameters to be utilized in decompressing said digital data information signals.

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~~21~~ 93. (NEW) The improved electronic camera of claim ~~88~~, further comprising memory allocating means for allocating said memory means in accordance with at least one of said plurality of data format codes.

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~~22~~ 94. (NEW) The improved electronic camera of claim ~~93~~, further comprising image resolution determining means for selectively determining which compression algorithm parameters are applied to said digital data information signals.

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~~23~~ 95. (NEW) The improved electronic camera of claim ~~94~~, wherein said digital data compression algorithm is recorded in said memory means and further comprising marking means for indicating the compression algorithm parameters utilized in compressing said digital data information signals.

96. (NEW) An electronic video translator apparatus comprising:

- input means for receiving a first memory device having stored therein analog image signals;
- means for converting said received analog image signals to digital image signals;
- means for providing a digital data format code in said translator apparatus which corresponds to a digital data input format utilizable by a predetermined type of data processing device; and
- means for formatting said digital information signals in accordance with said specified digital data format code.

97. (NEW) The electronic video translator apparatus of claim 96, further comprising:
output means for receiving a second memory device; and
means for storing said formatted digital image signals on said second memory device.

98. (NEW) The electronic video translator apparatus of claim 97, wherein said second memory device is removably mounted in said translator apparatus.

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99. (NEW) An electronic camera for capturing an image comprising:
digital data format means for providing a data format code in said camera wherein said format is compatible with the input data format utilizable by a predetermined type of information handling device; and
means for formatting a digital representation of a captured image in accordance with said digital data format code.

100. (NEW) The electronic camera of claim 99, further comprising:
means for storing said formatted digital representation of said captured image on a memory device.

101. (NEW) The electronic camera of claim 99, wherein said memory device is removably mounted in said camera.